

RISE & HIT

Manual



The information in this document is subject to change without notice and does not represent a commitment on the part of Native Instruments GmbH. The software described by this document is subject to a License Agreement and may not be copied to other media. No part of this publication may be copied, reproduced or otherwise transmitted or recorded, for any purpose, without prior written permission by Native Instruments GmbH, hereinafter referred to as Native Instruments.

“Native Instruments”, “NI” and associated logos are (registered) trademarks of Native Instruments GmbH.

Mac, Mac OS, GarageBand, Logic, iTunes and iPod are registered trademarks of Apple Inc., registered in the U.S. and other countries.

Windows, Windows Vista and DirectSound are registered trademarks of Microsoft Corporation in the United States and/or other countries.

All other trade marks are the property of their respective owners and use of them does not imply any affiliation with or endorsement by them.

Document authored by: Adam Hanley

Software version: 1.0 (04/2014)

Special thanks to the Beta Test Team, who were invaluable not just in tracking down bugs, but in making this a better product.

Germany

Native Instruments GmbH
Schlesische Str. 29-30
D-10997 Berlin
Germany
www.native-instruments.de

USA

Native Instruments North America, Inc.
6725 Sunset Boulevard
5th Floor
Los Angeles, CA 90028
USA
www.native-instruments.com

Japan

Native Instruments KK
YO Building 3F
Jingumae 6-7-15, Shibuya-ku,
Tokyo 150-0001
Japan
www.native-instruments.co.jp



© Native Instruments GmbH, 2014. All rights reserved.

Table of Contents

1	Welcome to RISE & HIT!	5
1.1	About the Library	6
1.2	Key-Mapping and Playback	6
2	The RISE & HIT Interface	8
2.1	Master Controls	9
2.2	Layer and Sample Browsers	10
2.2.1	Browsing and Loading Layers	10
2.2.2	Browsing and Loading Samples	13
2.3	The Main Page	15
2.3.1	The Waveform Displays	16
2.3.2	The Layers	16
2.4	Maximized Layer View	18
2.4.1	Mixing and FX Controls	20
2.4.2	Modulation	21
2.5	Master FX	24
2.5.1	The Insert Effects	26
2.5.2	The Send Effects	28
3	Credits	31

1 Welcome to RISE & HIT!

Thank you for downloading RISE & HIT. On behalf of the Native Instruments team, we hope this new KONTAKT Instrument truly inspires you.

RISE & HIT is a cinematic sound effect library for KONTAKT 5 or the free KONTAKT PLAYER. The instruments are presented in a custom designed interface to inspire creativity and make the production process quick and easy.

This manual will give you an overview of the included instruments.



To get the best from this instrument please read the manual in its entirety.

Manual Conventions

This manual uses particular formatting to point out special facts and to warn you of potential issues. The icons introducing the following notes let you see what kind of information is to be expected:



Whenever this exclamation mark icon appears, you should read the corresponding note carefully and follow the instructions and hints given there if applicable.



This light bulb icon indicates that a note contains useful extra information. This information may often help you to solve a task more efficiently, but does not necessarily apply to the setup or operating system you are using; however, it's always worth a look.

Furthermore, the following formatting is used:

- Text appearing in (drop-down) menus (such as *Open...*, *Save as...* etc.) and paths to locations on your hard drive or other storage devices is printed in *italics*.
- Text appearing elsewhere (labels of buttons, controls, text next to checkboxes, etc.) is printed in **light blue**. Whenever you see this formatting applied, you will find the same text appearing somewhere on the screen.
- Important names and concepts are printed in **bold**.
- ▶ Single instructions are introduced by this play button type arrow.

→ Results of actions are introduced by this smaller arrow.

1.1 About the Library

For many cinematic productions a well-crafted riser can heighten tension and suspense. A perfectly timed hit at the end of the rise resolves this tension, often in a dramatic way (for example, a scene in which we watch a timer count down the final seconds until an explosion).

RISE & HIT is based on two simple, yet powerful concepts: the easy layering of sounds and effects, as well as a perfectly synchronized riser.

RISE & HIT allows you to specify an exact time—whether in tempo-synced beats or absolute seconds—for the rise. The custom script engine will automatically stretch or select samples in order to fit this time perfectly. So, no matter what samples you select, the time between pressing the MIDI note and reaching the apex of the rise will always be the same. This makes it very easy to perfectly time your rise and hit sounds.

As the name suggests, in the RISE & HIT instrument you have two complimentary samples: the rise and the hit. Two samples are combined as a layer, and in a single instrument you can have up to four layers. Each layer has its own effects, which can be modulated for added sonic sculpting.

Library Details

- Over 200 Preset NKI files.
- Number of Layer Presets: 670 original sounds and 80 additional layers with modulation and effects, giving a total of 750.
- Number of Samples: 4250
- Total Sample Size: 8.6GB compressed to 6.25GB using KONTAKT's lossless compression.

1.2 Key-Mapping and Playback

For RISE & HIT, the keyboard is divided into two halves:

- The lower octaves (**C-2** - **C#3**) trigger the riser.
- The higher octaves (**D3** - **G8**) trigger the hit.

KONTAKT's virtual keyboard is colored to reflect this mapping:



KONTAKT's virtual keyboard when RISE & HIT is loaded

- The riser keys are colored green.
- The hit keys are colored red.

2 The RISE & HIT Interface

The RISE & HIT interface is custom built with a focus on layering and sound manipulation.



The RISE & HIT Main Page

The top of the interface contains the instrument header, which will be familiar to anybody who has used KONTAKT before. The functions of these controls are covered in the KONTAKT 5 Application Reference.

This document will focus on the controls and functions unique to the RISE & HIT instruments.

2.1 Master Controls

The Master Controls are located at the top of the instrument interface, just below the main KONTAKT instrument header.



The Master Controls

These are visible on all pages (with the exception for the browsers) and control the main performance features:

- **RISE TIME:** Defines the length of the rise, i.e. the time between the MIDI trigger and the rise's apex. All rise samples in the instrument will conform to this setting.
- **Rise Time Mode:** Specifies the scaling of the **RISE TIME** control:
 - **BEATS:** Select this option to sync the rise time to the host tempo. The rise time will be defined by beat subdivisions.
 - **SECONDS:** Select this option to set the rise time in seconds. Tempo settings and changes will be ignored when this option is selected.
- **LATCH MODE:** When active, pressing a trigger key will play the whole sample, regardless of how long you hold the key. When inactive, the sample will sound only for as long as the key is held.

2.2 Layer and Sample Browsers

The RISE & HIT instrument contains two subpreset types: Layers and Samples.

- Samples are the basic building-blocks of the instrument. They are the audio files used at the lowest level of the instrument.
- Layers contain a combination of samples and effects.

2.2.1 Browsing and Loading Layers

You can browse and load layer presets in two ways:

- from the Layer Browser
- by using the left and right arrows to cycle through them.

You can access both of these options on the right side of the layer header area.

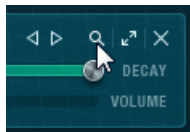


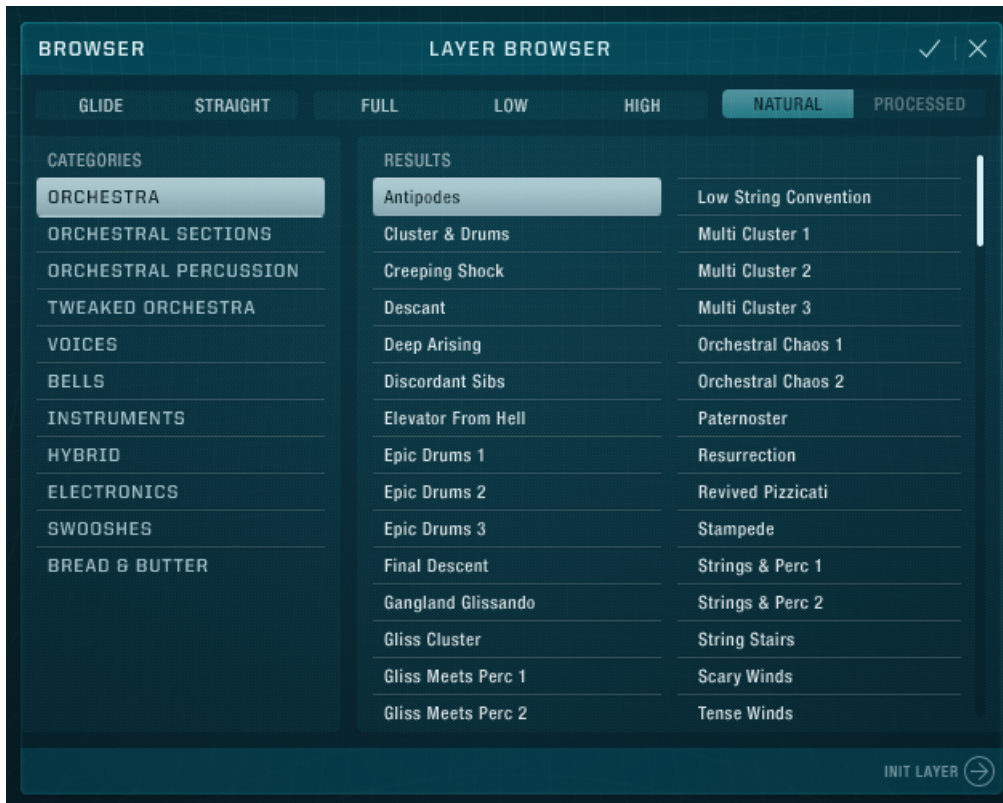
The layer browsing controls are the three leftmost icons located on the right side of the layer header.

Clicking on the arrows will cycle through layer presets, loading the next or previous layer preset into the currently selected layer slot.

The Layer Browser can be used to give you a full overview of the available layer presets and their general characteristics.

- To open the Layer Browser, click the magnifying glass icon in the layer header.





The Layer Browser

The Layer Browser has three main areas:

- **CATEGORIES:**-The column to the left shows a list of the available layer categories.
- **RESULTS:** The column to the right displays a list of the layer presets related to the selected category and tags.
- **Tags:** The buttons along the top are basic sound tags. You can select these to better define the **RESULTS** list and help you find the sound you are after.

Layer Tags

The layer tags are as follows:

- **GLIDE/STRAIGHT:** These tags describe the pitch movement.
 - **GLIDE** means that the pitch of the layer will move over time, usually rising over time.
 - **STRAIGHT** describes a sample with a static or unmoving pitch.
- **FULL/LOW/HIGH:** These are used to describe the general position of the layer in the audio spectrum. In other words, these tag the layer's general tonal center.
- **NATURAL/PROCESSED:** Describe the sound source. Note that these tags are not available for all categories, as some contain only natural or only processed sounds.
 - **NATURAL** sounds are cleanly recorded acoustic sounds, or "real" sounds.
 - **PROCESSED** sounds are those that have had some kind of effects applied to them.

Loading a Layer

To find and load a sample:

1. Select the category you wish to browse from the **CATEGORIES** list.
 2. Further refine the results by using the **Tags**.
 3. Select a layer preset by clicking its name in the **RESULTS** list.
 4. Click the tick in the Layer Browser header to confirm your selection.
- The selected layer preset will be loaded into the selected layer slot and the Layer Browser will close.

If you wish to exit the Layer Browser without loading a layer preset, click the **X** icon on the far right of the Layer Browser header.

If you wish to load an empty layer to create your own sound, click the **INIT LAYER** button at the bottom right of the interface.



Loading a layer preset will not overwrite certain layer settings; these are the volume sliders, timing controls, and the sends. This is so that your mix doesn't suddenly change when you browse through layer presets.



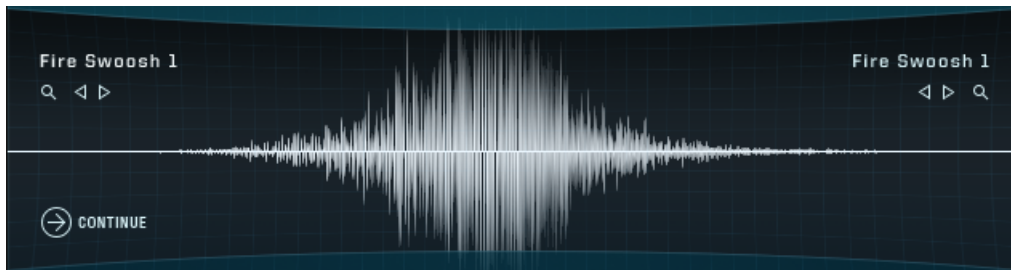
Due to technical limitations, it is not possible to load the same set of samples into all four layers. The maximum number of layers into which you can load the same sample is three.

2.2.2 Browsing and Loading Samples

You can browse and load samples in two ways:

- from the Sample Browser
- by using the left and right arrows to cycle through them

Both of these options can be found in the waveform display, and the controls function in the same way as the layer browsing controls.



The waveform display: sample browsing controls are located in the top corners.

The Sample Browser

The Sample Browser is similar in many ways to the Layer Browser, with the same [CATEGORIES](#) and **Tags** options, and the same general functionality.



The Sample Browser

However, it differs from the Layer Browser in two important ways:

- The [INIT LAYER](#) button is not available, but is replaced by a [LOAD RISE & HIT](#) option to the bottom left.
- When you use the Sample Browser, you will be loading either a rise sample or a hit sample, depending from where you entered the Sample Browser. With the [LOAD RISE & HIT](#) option active, you will load a complimentary pair of Rise and Hit samples.

2.3 The Main Page

The Main Page is the first page you will see when you open an instrument.



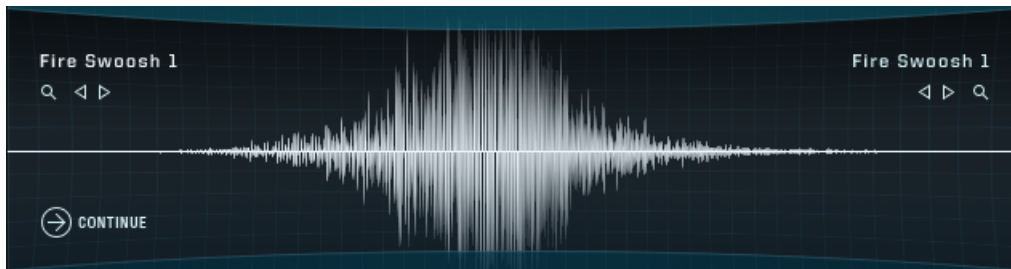
The Main Page

- At the top are the Master Controls (covered in section [↑2.1, Master Controls](#)).
- Below those are the waveform displays.

- The main area of the Main Page displays the layers.

2.3.1 The Waveform Displays

The waveform displays have functions beyond displaying the sample waveforms.



The Waveform Displays

- ▶ Clicking on the magnifying glass will open the Sample Browser.



The sample loaded from the Sample Browser depends on where you accessed the browser from. Entering the Sample Browser from the left (rise) side will load rise samples, and entering from the left (hit) button will load hit samples.

- ▶ Using the left and right arrows will cycle through the available samples.
- ▶ To the bottom left of the waveform is the **CONTINUE** button—when this is active, triggering the rise will automatically continue into the hit sound. Unlike the other waveform controls, this option is independent of the layer selection.

2.3.2 The Layers

Layering is an important part of RISE & HIT, and on the Main Page you can view all four available layer slots at once, as well as perform certain mix and timing adjustments.



The Layers

- ▶ Clicking on a layer, or on controls within the layer, will highlight it.
- When a layer is highlighted, the waveform display shows the samples for the layer, and changes in the Sample Browser are applied to this layer.
- ▶ Clicking on an empty layer slot will open the Layer Browser for you to select a layer preset to load into the slot.

At the top of a layer is the layer header, which contains the following controls (from left to right):

- **Layer On/Off:** Clicking this button will mute or unmute the layer. Holding the [Shift] key on your computer keyboard while clicking this button will solo the layer.
- **Layer Name:** Displays the name of the currently loaded layer.
- **Layer Browsing Arrows:** Clicking the left and right arrows will cycle through and load layer presets.
- **Open Layer Browser:** Clicking the magnifying glass will open the Layer Browser (details for the Layer Browser are covered in section [↑2.2, Layer and Sample Browsers](#))
- **Maximize Layer:** Displays additional controls for the layer, including modulation options.

- **Delete Layer:** Clicking the **X** icon at the far right of the layer header will delete the layer.



Deleting a layer will remove all settings and is not reversible. Only use this option if you are sure you want to completely remove the layer.

Below the layer header controls are the timing and mixing controls for the layer:

- **OFFSET:** Adjusts the rise time relative to the master **RISE TIME** control. Moving the slider to the right will delay the start time of the sample and compress its length. The time between the MIDI trigger and the rise apex will still be the time defined by the master **RISE TIME** control.
- **WHOOSH:** Toggles whoosh mode: a short sample will be loaded that complements the current sample selection. This sound can be thought of as an attack for the hit sample, rather than a full rise sample.
- **DECAY:** Controls the length of the hit sample.
- **VOLUME:** The left volume slider controls the volume level of the rise sample, and the right slider controls the rise volume.
- **Link:** Activating the button between the **VOLUME** sliders links the sliders.

2.4 Maximized Layer View

The maximized layer view gives you access to more in-depth editing of a layer's sound, including modulation options.

- To maximize a layer, click the double arrow icon in the layer header.



By maximizing a layer, the other three layers are hidden from view, and additional controls for the selected layer are revealed.



The Maximized Layer View

The layer controls that were available in the Main Page are mostly unchanged.



You can navigate from one layer to another, without returning to the Main Page, by using the arrow buttons to the left and right of the layer window.

2.4.1 Mixing and FX Controls

Each side of the layer is given an additional six controls: two additional mix sliders, two send knobs, and two macro effect knobs.

The additional mix sliders are:

- **PAN**: Sets the position of the sound in the stereo field.
- **TUNE**: Controls the tuning (pitch adjustment) of the sound.

The send knobs are:

- **DELAY**: Sets the amount of signal sent from this sound to the delay effect (controls for which can be found on the Master FX Page).
- **REVERB**: Sets the amount of signal sent from this sound to the convolution effect (controls for which can be found on the Master FX Page)

The final two controls are macro controls. These are one-knob effects designed specifically for this instrument.

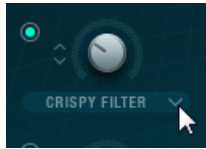


The macro effect knobs

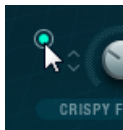
- The upper knob focuses on tonal shaping effects, like EQ sweeps and filters.
- The lower knob can be one of any of the available creative effects, which include variations of distortions, digital lo-fi, stereo manipulation, and modulation effects.

Selecting a mode for the knob is done via the drop-down menu below the knob:

- Click the name to select the effect mode.



Since the macro effects are inserts that may not have a fully neutral position, an on/off switch is provided. The on/off switch is the circular button located to the top left of the macro knob.



Macro on/off



All controls listed in this section are affected by the link button. So it is possible to link all mixing and FX options with this button.

Between the two sides of the layer controls is the **CROSSFADE** knob.



The Crossfade knob

This controls the volume crossfade time during the transition from rise to hit. Higher values will blur the transition, whereas low values will give a sharper cut.

2.4.2 Modulation

Every mix and effect control in a layer can be modulated. The modulation source is a high-resolution step sequencer that runs over the length of the sound. Each control has its own sequencer, creating a powerful modulation system.

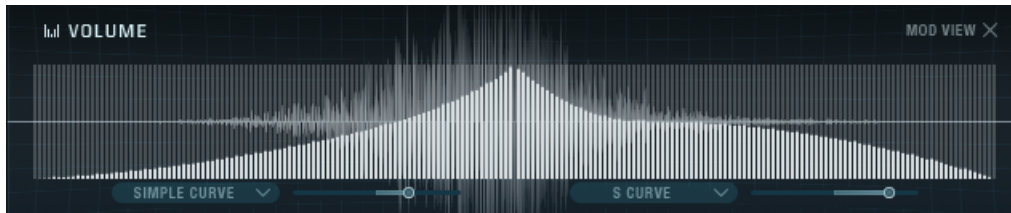
The Modulation View

By default, the modulation view is open, but if it is not, it can be opened easily:

- ▶ Click the **MOD VIEW** button in the waveform display area to open the modulation view.



With the modulation view open, the step sequences will be overlaid on top of the waveform display, along with some additional controls.



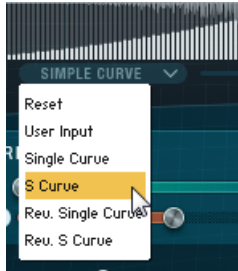
The modulation view

- To the top left is the name of the modulation destination.
- **MOD VIEW X**: To the top right is the button that closes the modulation view.
- Below the step sequences are two controls that allow you to edit the values in the step sequences in different ways.

Editing the Modulation Sequences

The modulation sequences have a number of different editing modes, depending on how you wish to use them.

- To select the editing modes, click the drop-down menu below the sequence table.



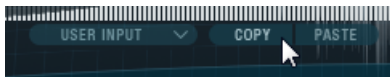
The menu contains six entries to select from:

- *Reset*: Clears the modulation sequence. This can be useful if you are using *User Input* mode.
- *User Input*: Allows you to draw in your own sequence.
- *Single Curve*: Automatically creates a curve that peaks at the rise/hit apex. The shape of the curve can be specified with a slider.
- *S Curve*: Automatically creates an S-shaped curve that peaks at the rise/hit apex. The exact shape of the curve can be specified with a slider.
- *Rev. Single Curve*: Like the *Single Curve* setting, only with the zero value at the rise/hit apex.
- *Rev. S Curve*: Like the *S Curve* setting, only with the zero value at the rise/hit apex.

All of the curve-based settings in this menu use a slider to control the shape of the curve.

When User Input is selected, the slider is replaced with two buttons.

▪



The User Input Buttons

- **COPY**: Copies the current modulation sequence into temporary memory.
- **PASTE**: Pastes the copied sequence into the connected modulation sequence.

Assigning Modulation

Assigning modulation amounts in RISE & HIT is easy:

1. Beside each control that can be modulated is an icon showing two arrows.
2. Click and drag this icon to control the intensity of the modulation.



3. As you drag this control, the modulation range will be displayed in the knob/slider.
4. Holding the [Alt] key on your computer keyboard and clicking on this icon will toggle modulation bypass on or off.

Modulation for the knobs and volume slider is assigned such that the top value of the modulation table is equivalent to the value of the knob. So, when modulation intensity is at its maximum, the range of the modulation table is from zero to the value of the knob.

Modulation for the [PAN](#) and [TUNE](#) controls is bipolar, so modulation is applied in a range both above and below the current slider value.

2.5 Master FX

The Master FX controls are contained on the second tab, located at the bottom of the interface.

- Click on the [Master FX](#) tab to display the Master FX page.



- The Master FX page will open and display all of the Master FX controls.



The Master FX page

There are two main types of master effects:

- The **INSERT FX**, located in the top two rows.
- The **SEND FX**, located in the bottom row.

The insert effects are applied to the combined output of the layers. They can be used to control or process the final mix of the layers.

The send effects are fed from the send levels of the individual layers. They are routed in parallel to the insert effects.

So all layers enter the insert effects chain in full, but only a specified amount of the individual layers enter the send effects chain.

2.5.1 The Insert Effects

There are four insert effects. All of which can be turned on or off by using the circular button to the left of the effect label.

Equalizer



The Equalizer Controls

An equalizer (or EQ) allows the user to adjust the timbre of a sound by changing the level of frequency bands. The EQ in RISE & HIT is based on the Solid-G EQ, which has four frequency bands: a low-shelf band, two mid-range bell-shaped bands, and a high-shelf band.

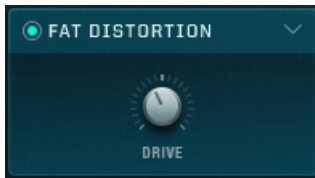
Each band has two controls:

- **FREQ:** For the shelves, this sets the starting frequency of the shelf; for the mid bands, this sets the central frequency of the band.
- **GAIN:** Controls the amount of cut or boost applied to the band.

The EQ has two additional controls:

- **Preset Menu:** Located to the top right of the EQ window, you can use this control to load from a selection of EQ presets.
- **OUTPUT:** Controls the level of the signal at the output of the EQ effect.

Distortion



The Distortion Controls

A distortion effect alters the audio signal in a way that distorts the waveform to produce additional harmonics in the sound. Distortions can have a variety of characters depending on how the effect is achieved: some distortions transform the waveform, and some are a result of overloading an audio system. As such, the RISE & HIT distortion allows you to select from a collection of different modes.

The distortion effect is the first on the left in the second row of effects. It has two controls:

- **Distortion Mode:** The character of the distortion effect is selected by using the drop-down menu that also functions as the effect's label.
- **DRIVE:** Controls the intensity of the distortion effect.

Compressor



The Compressor Controls

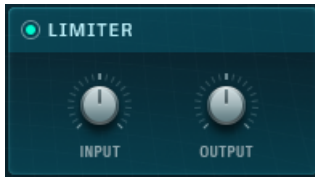
A compressor is used to alter the dynamics of a signal. Generally they are used to control the differences in volume between soft and loud signals. Like distortions, compressors have different characters depending on their settings and design. And so, like the distortion effect, the compressor has a number of modes to choose from.

The compressor has three controls:

- **Compressor Mode:** The character of the compression effect is selected by using the drop-down menu that also functions as the effect's label.

- **AMOUNT:** Controls the intensity of the compressor.
- **MIX:** Controls the dry/wet mix of the effect. When the knob is set fully left, the output of the effect will be the same as the input; when it is set fully right, the output of the effect will be that of the compressed signal. A setting in between these two extremes will mix these signals accordingly.

Limiter



The Limiter Controls

A limiter is a specific type of compression effect. It uses powerful settings to completely suppress volume peaks, while trying to minimize distortion.

The limiter has two controls:

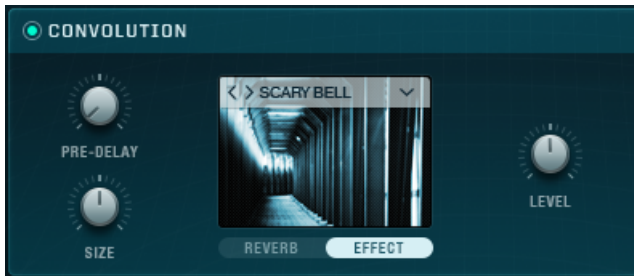
- **INPUT:** Controls the level of the signal going into the limiter.
- **OUTPUT:** Controls the level of the signal coming out of the limiter.

2.5.2 The Send Effects

The send effects take their input of the send levels in the layer's maximized view. They are routed in parallel to the main mix of the layers and insert effects.

There are two send effects, which can be turned on or off by using the circular button to the left of the effect name.

Convolution



The Convolution Controls

A convolution effect basically super-imposes one sound onto another by using samples called impulse responses (or IRs). An IR can be thought of as a fingerprint of a sound.

Convolution effects work especially well for replicating acoustic spaces (reverb effects) as well as tonal alterations like speaker simulations and EQ/Filter replication. However, you can also input a number of different IR samples to produce unique and crazy effects.

The IR samples in the RISE & HIT Convolution effect are selected in the central area of the effect window.

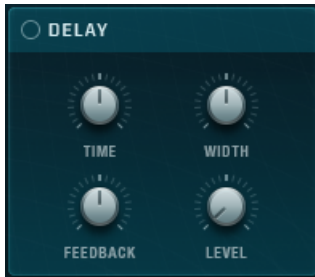
- The main part of this area is an illustration of the IR file that is currently loaded.
- Below this are the Impulse Response Category buttons: these select the contents of the main IR menu:
 - **REVERB**: Impulse responses in this category are taken from analysis of acoustic spaces, or synthesized acoustic spaces. They will give the sound a sense of space.
 - **EFFECT**: Impulse responses in this category are from more unusual sources.
- Above the illustration are the browsing and loading controls:
 - The left and right arrows cycle through the impulse responses available in the category.
 - The drop-down menu can be used to view a list of the impulse responses, and then select one to load by clicking on its name.

The Convolution also includes the following controls:

- **PRE-DELAY**: Adjusts the delay time between the input signal and the processed signal.

- **SIZE**: Alters the size of the loaded impulse response.
- **LEVEL**: Controls the output level of the effect.

Delay



The Delay Controls

A delay effect produces a copy of the input signal, only delayed in time, like an echo. It can be used to produce rhythmic effects or spacial effects.

The delay effect has four controls:

- **TIME**: Controls the delay time (i.e. the length of time between the input signal and the delayed signal).
- **WIDTH**: Controls the stereo width of the delay echoes.
- **FEEDBACK**: Controls how much signal is fed from the effect output back into the input (i.e. the number of repeating echoes).
- **LEVEL**: Controls the output level of the effect.

3 Credits

Product Concept, Design & Production: Uli Baronowsky

User Interface Design: Cameron Wakal, Simon Martin

KSP Scripting: Klaus Baetz

Product Design & Documentation: Adam Hanley

Finalization and KSP Support: Thanos Kazakos

Quality Assurance: Bymski

Artwork: Yvonne Hartmann

Project Management: Christian Wachsmuth

Special Thanks: André Wedel / Bodek Janke / Brigitte Angerhausen / David Rusitschka / Dynamedion, David Christiansen, Holger Busse & Brandenburg Staatsorchester / Drummers of the Guerzenich Orchestra Cologne / Frédéric Devanlay / Georg Brenner / Ingo Hermes / Klaus Baetz / Mark Joggerst / Michael Kokott & St. Stephan Choir / Monika & Lilianna Dömer / Philipp Mathias Kaufmann / Stephan Lembke / Tilman Hahn & Tonsturm / Volker Pannes / Tobias, Robert, Christian, Adam, Philipp, Thanos & everyone at Native Instruments